ABSTRACT

The present invention provides a process for fluid assisted injection molding comprising the step of providing an injection molding apparatus having a mold body that defines a mold cavity. The process further comprises the steps of supplying a quantity of fluent plastic to the mold cavity, followed by injecting a fluid into the mold cavity. The fluid forms an expanding fluid pocket in the mold cavity, driving plastic to the furthest recesses of the mold and ensuring a smooth surface finish of the final molded product. A reservoir is selectively connectable to a plastic injection runner, and can be opened to the runner to receive molten plastic ejected by the introduction of the fluid to the mold cavity. When the reservoir is thusly connected, the pressure of the fluid forces the plastic through a supply passage, in a direction substantially opposite to its initial injection direction.